

Figure 1.

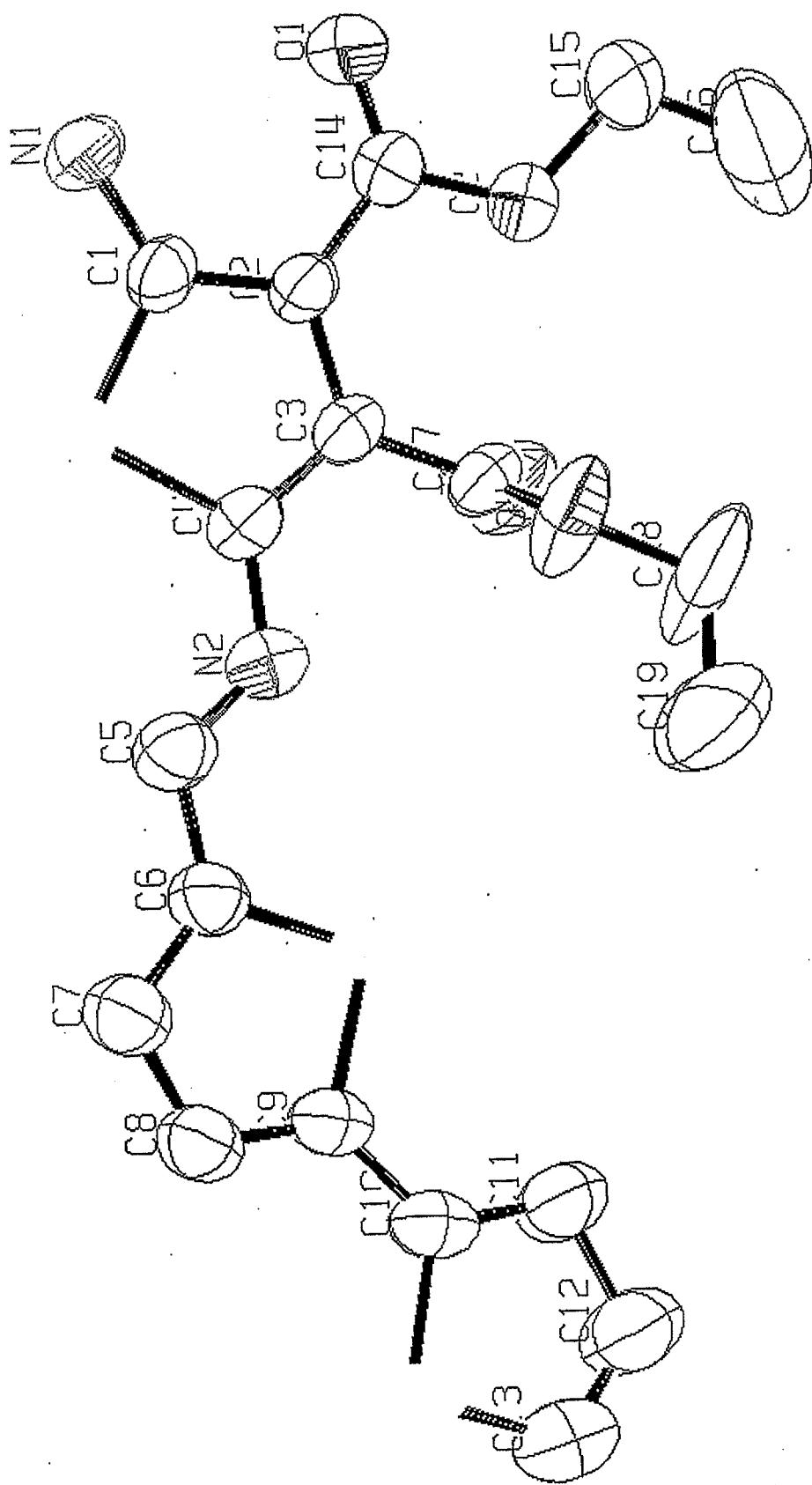


Figure 2.

Compound	λ_{abs} (nm) ^b	ε_{max} (M ⁻¹ cm ⁻¹) ^c	λ_{em} (nm) ^c	ΔE (eV) ^d	E_g (eV) ^e	τ (ns)	Φ^f (10 ⁻²)	E_{pa}^1 V	E_{pa}^2 (V)	E_{pa}^3 V	E_{pa}^4 V	E_{pc}^2 (V)
1	350	21 850	425	3.2	3.1	0.9	2.3	1.43	1.21	-	-1.17	-1.63
2	305	372	372	3.7	3.0	13.5	3.8	0.23	0.59	0.83	-1.44	-
3	440	25 489	530	2.5	2.3	6.2	0.04	0.24	1.02	1.85	-1.12	-1.84
4	470	31 530	610	2.2	2.1	2.9	0.33	0.96	1.23	1.73	-1.09	-1.85
5	492	542	542	2.3	1.9	5.8	0.42	0.98	1.57	-	-1.12	-1.88
6^g	413	-	479	2.7	2.5	0.9	0.33	0.82	1.12	-	-	-
7	423	-	-	2.5	2.4	-	-	0.84	1.20	-	-	-

^aScan rate 1V/sec, 0.1 M Bu₄NPF₆, glassy carbon working electrode, Ag/AgCl (sat'd) reference electrode, Pt-wire electrode vs. Fe/Fe⁺; ^bAbsorption; ^cEmission; ^dRefers to absolute HOMO-LUMO difference; ^eSpectroscopic band-gap; ^fRelative to bis thiophene;¹⁰ ^gLiterature values¹¹

Figure 3.

Compound	Aryl-Aryl ^a	C=X ^b	=C-Aryl	Plane Angle ^c
2	1.443 Å	1.281 Å	1.439 Å	170°
Analogue ^d	1.479 Å	1.334 Å	1.614 Å	180°

^abisthiophene distance; ^bX=N for **2** and C for the analogue; ^cRefers to the aryl-C=X dihedral angle; ^dFrom Zobel for bisthiophene and thiophene alkene values.¹²

Figure 4.

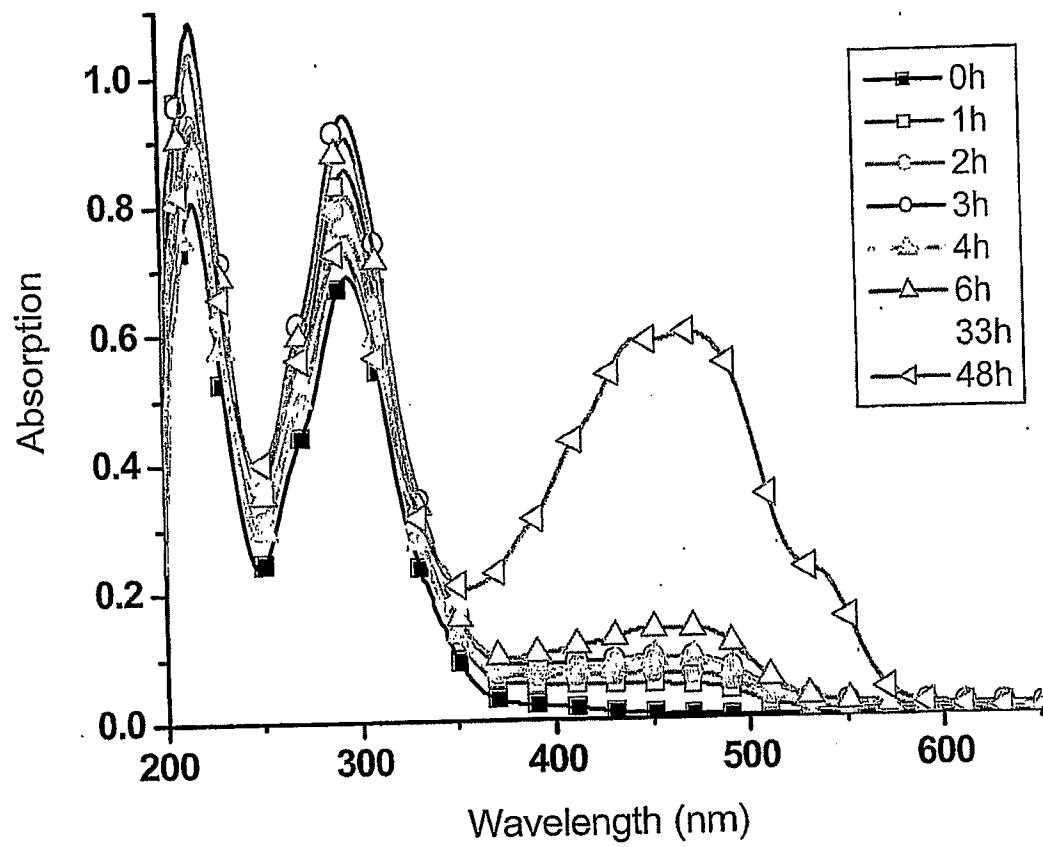


Figure 5

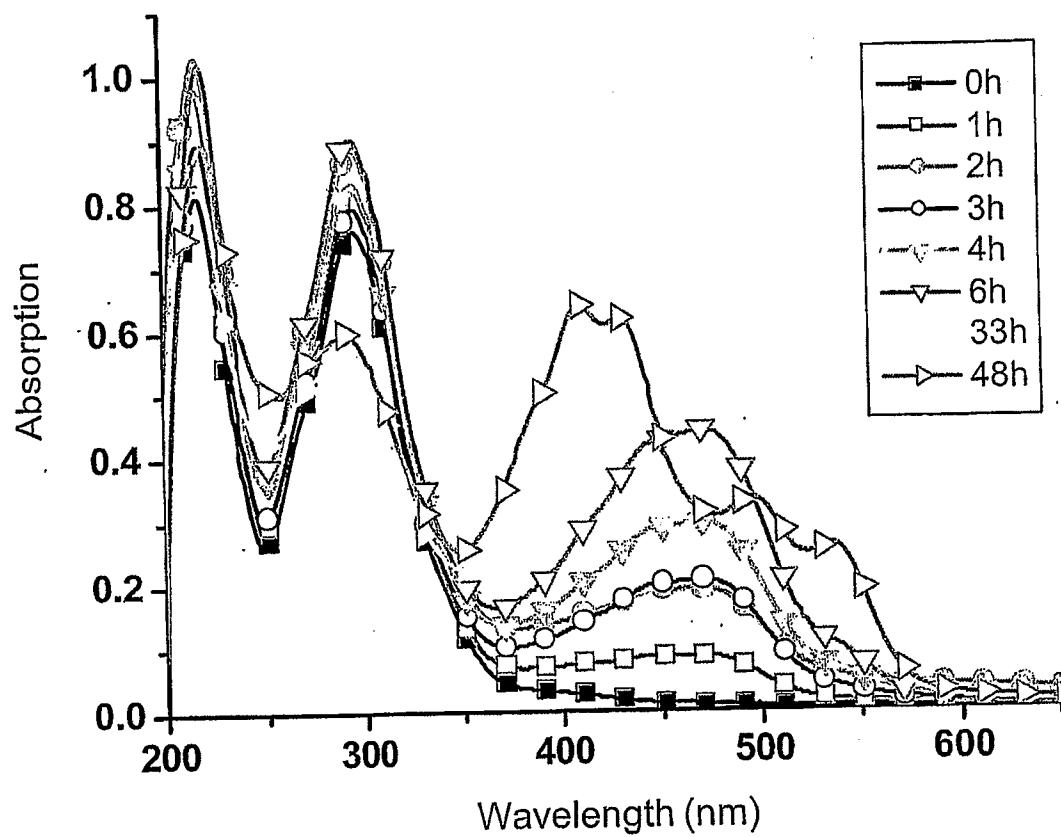


Figure 6.

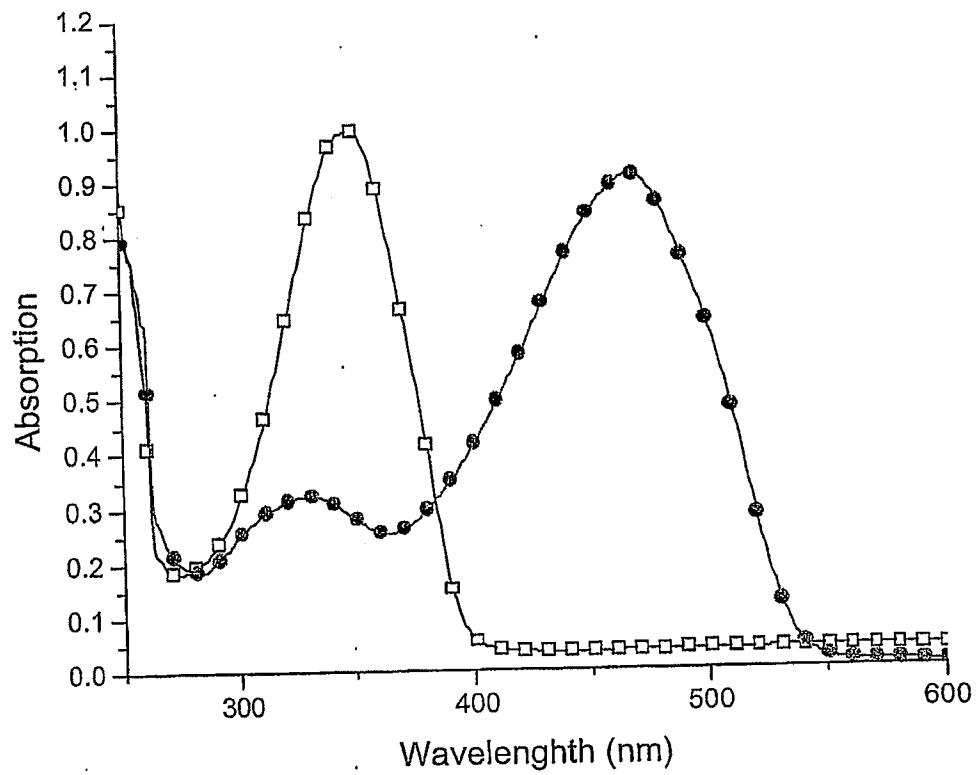


Figure 7.

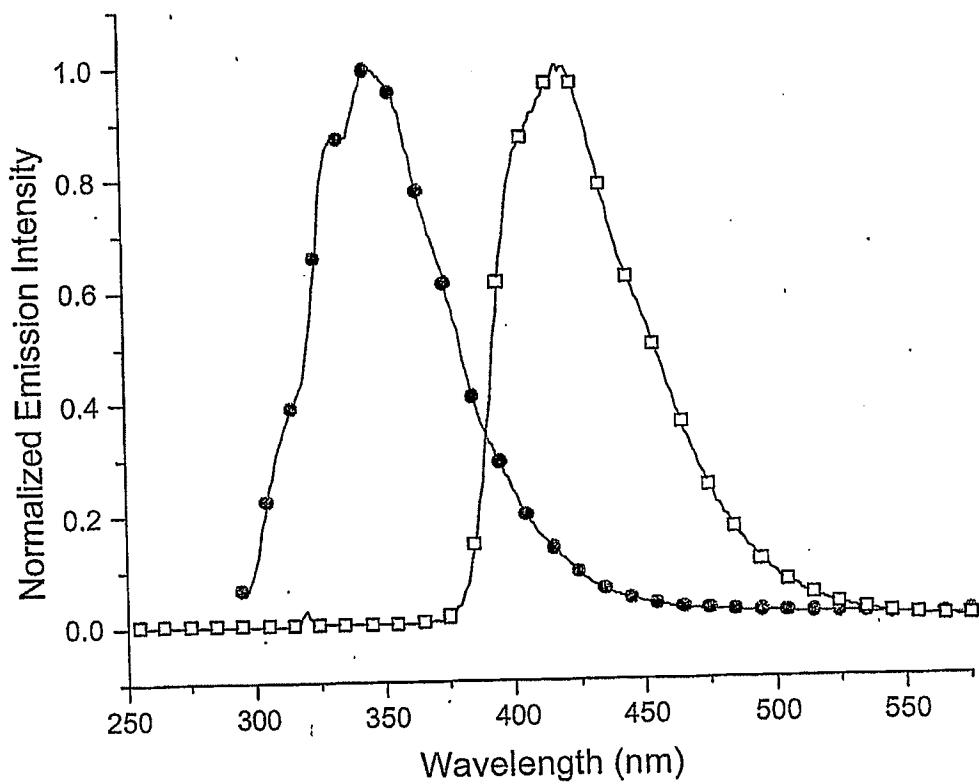


Figure 8.

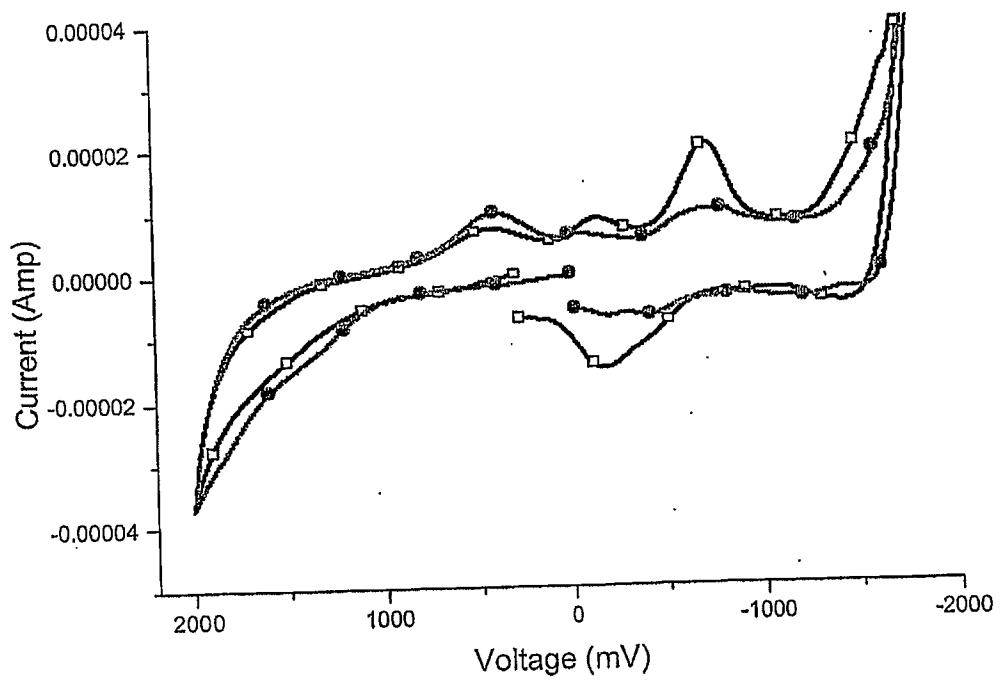


Figure 9.

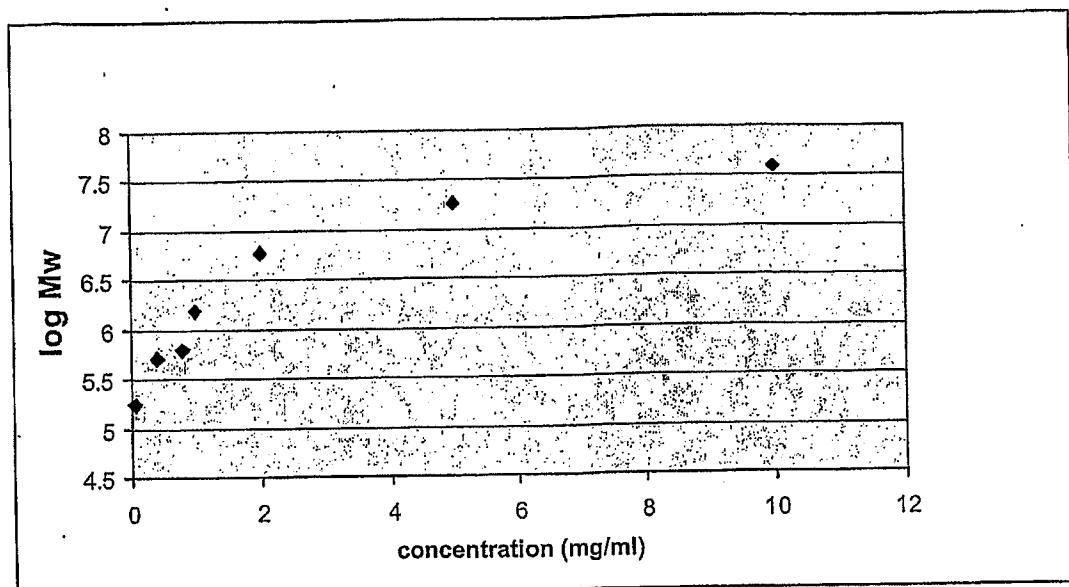


Figure 10.